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(12) **United States Patent**  
Gutierrez

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(54) **SUBSCRIBER UNIT BURST MODE  
RESERVATION IN A CODE DIVISION  
MULTIPLE ACCESS WIRELESS  
COMMUNICATION SYSTEM**

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#### Related U.S. Application Data

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(52) **U.S. Cl.** ..... 370/320; 370/335; 370/346;  
455/450

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370/335, 342, 346; 455/450, 561, 509,  
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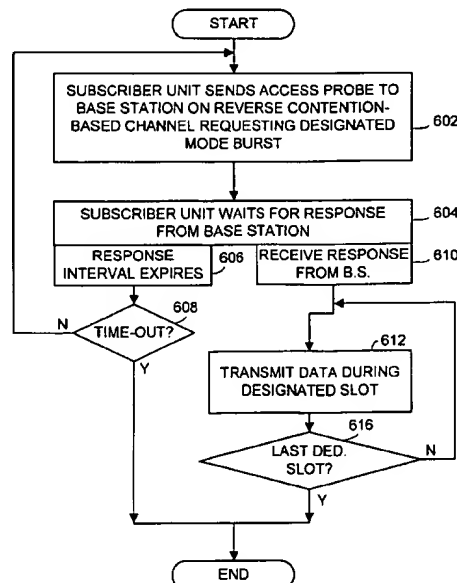
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#### (57) ABSTRACT

A CDMA communication system supports designated mode data bursts on a reverse link contention based channel from a subscriber unit to a base station. The reverse link contention based channel also supports contention-based transmissions from the subscriber unit to the base station. When transmissions are scheduled and serviced in the designated mode data burst, collisions are avoided. Further, because setting up the designated mode data bursts on the reverse link contention based channel require little overhead as compared to the setup of a traffic channel the CDMA system is operated at a greater efficiency. The reverse link contention based channel may be a Reverse Common Control Channel, a Reverse Access Channel or another contention-based channel. Designated mode data bursts on the reverse link contention based channel may consume a single slot or multiple slots. The number of slots consumed in the designated mode data bursts depends upon the volume of data the subscriber unit has to transmit to the base station. The subscriber unit may state the amount of data it desires to transmit in the designated mode data burst. Based upon this stated amount, the base station may reserve multiple slots for the designated mode data burst. Then, the subscriber unit will transmit data during the slots.

25 Claims, 12 Drawing Sheets



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